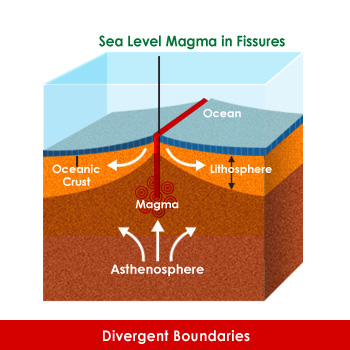
The Dynamic Earth Unit Test (100points)

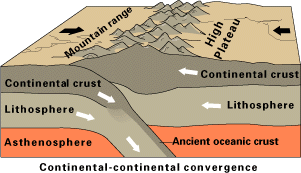
Part I (10points)

Label each diagram with the type of boundary shown. (Answers are shown)

1)



2)



3)



Part II (10points)

Name the four types of faults we discussed and draw a diagram to represent each. (Hint: Think of our Styrofoam models)

Please Include…

1. Name of type of fault
2. Clear diagram showing the two plates of the fault
3. Arrows showing the direction of the plates on each side of the fault line

1)

2)

3)

4)

Part III (10points)

Fill in the blanks

The highest mountain ranges in the world are made up of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mountains. They are caused by \_\_\_\_\_\_\_\_\_\_\_\_\_ plates squeezing rock layers together. Another type of mountain is cause by molten rock rising through the crust and pushes up rock layers. These layers are worn down over time and expose the hardened rock below. These are \_\_\_\_\_\_\_\_\_\_ mountains.

The Hawaiin Islands are the tips of volcanic mountains that have formed over \_\_\_\_\_\_\_\_\_\_\_\_, which are pockets of magma beneath the earth’s crust. Some of the largest volcanic mountains have created the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, an under sea mountain range.

Part IV (30points)

Writing

You are a seismologist and have just been asked to report on the Earthquake that we experienced in Rhode Island yesterday at 2:08pm. Although it did not feel major here, we were not near the epicenter. You have data from here in Rhode Island, along with three other points that have readings from the earthquake. **Not using any specific data points, explain how you will determine the epicenter of the earthquake, and explain how you will rate the intensity of the earthquake? What information will you need?**

Part V (10points)

1. What is the type of volcano that has built up the Hawaiian Islands?
2. A composite volcano had alternating layers of what two materials?
3. Scientists have a hard time predicting when Volcanoes will be explosive. What are two ways in which scientist try to predict when volcanoes are active?

Part VI (30points)

After hearing about Pangaea from a friend, John is confused as to how scientists would know that the continents used to be connected. Because you are now an expert, **describe to John some (at least 2) reasons that scientist believe that Pangaea once existed. Please use specific evidence that we discussed**.